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## MEMORANDUM

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6.23.88

TO: Paul Doherty, RPO  
THRU: Sharon Martin, AFITOM  
FROM: Eric Hess, E & E/FIT  
DATE: June 23, 1988

SUBJECT: HRS Considerations and Recommendations for further work at the  
Mound St. Power site (aka LaClede Gas), St. Louis, Missouri  
TDD #F-07-8708-29 PAN #FM00579PA  
Site #Y33 Project #001  
Superfund Contact: Pauletta R. France-Isetts

The results of the St. Louis Department of Health and the E & E/FIT sampling show that there is no PCB contamination of the oils in the basement of this former electric power plant facility. This conclusion is qualified by the fact that PCB detection limits were 1 ppm for the E & E/FIT data and that they are not known for the city of St. Louis data. Concentrations of PCB below the 1 ppm detection limit are possible in the samples collected by the FIT. However, no evidence was found to suggest that the oil in the basement may contain PCB. Initial concerns were based on the existence of large electric transformers on the site. Information obtained during the FIT investigation suggests that the oil in these transformers was moved off site. The most likely source of the oil is the Apex Oil Terminal located several yards uphill from the former electric power plant. This material is contained in a concrete basement and could easily be removed and sent to an oil recycling facility. Because this waste is contained, a removal operation could be undertaken readily and would be the most cost-effective approach for mitigating the oil contamination and circumventing further releases into the Mississippi River. The E & E/FIT does not recommend that a site investigation of the oil contamination be conducted.

The unexpected discovery of perhaps the largest coal gas plant site in Region VII, LaClede Gas and Light Company, mandates the E & E/FIT recommendation that a site investigation be conducted at this site. Currently, the Mound St. site is regarded as only the former plant facility. The clarification of site historical records suggests that the Mound St. site also should include the coal gasification works. Regardless of the final grouping of the power plant site and the gas works site, a site investigation should be conducted at the former LaClede Gas and Light Company.

The overall draft HRS score for this site was calculated to be 0.00, based solely on route characteristics. The low score reflects a

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lack of targets, documented contamination, and observed releases. The ground water route score is 0.0. If a release could be documented and some ground water use could be identified, this route score would increase to 6.12. The surface water route score is 0.0. If a release could be documented and industrial use of surface water confirmed, the route score would increase to 18.18. The nature of contaminants and the probable disposal methods used at this facility introduces the possibility for an air release of particulates. If this can be documented, the air route will score 55.64.

Assuming that observed releases and targets could be documented for the surface ground water, and air routes, the highest HRS score expected is approximately 34.75. This score is well above the score of 28.5 required for inclusion on the National Priorities List (NPL). However, if a lower score is determined, it may not reflect the true potential hazard posed by this site: large amounts of waste may exist on site and they may be releasing PAHs, phenols, and cyanides into local ground and surface water. HRS-II guidelines, slated for implementation in October 1988, would add potential environmental and food chain scores. HRS-II would also allow scoring the risk posed by the migration of contaminated particulates. Addition of these elements could increase the HRS score. Currently, no score "threshold" has been established for HRS-II. Therefore, there is no method to predict the potential for this site to score high enough for inclusion on the NPL under the auspices of HRS-II rules.

Regardless of the current HRS score, or the potential HRS-II score, this site is likely to be having a deleterious effect on the local environment. The degree of this effect can only be assessed through soil sampling, ground water monitoring, and the installation of seepage meters to document ground water releases into the Mississippi River. It is recommended that this additional work be assigned a medium priority, based on the potential for direct contact/inhalation hazards and the potential for food chain contamination.